CLAIMS

1 Use of a Ble fusion protein as an expression and folding marker and/ or an affinity tag.

2. Use of a Ble fusion protein as claimed in claim 1 as an expression and folding marker.

3. Use of a Ble fusion protein as claimed in claim 1 as an affinity tag.

4. Use of a Ble fusion protein as claimed in claim 1 as an expression and folding marker and an affinity tag.

5. Use of a Ble fusion protein as claimed in any of the preceding claims wherein the Ble fusion protein is the expression product of a Sh ble, Tn5 ble or Sa ble gene.

6. A method of immobilising a protein to a surface, wherein the protein is provided to the surface as a ble fusion protein and the surface is a surface derivatised with an antibiotic from the bleomycin family.

7. A method as claimed in claim 6 wherein the antibiotic from the bleomycin family is selected from the group consisting of bleomycin, phleomycin, tallysomycin, pepleomycin and Zeocin™.

8. A method as claimed in claim 7 wherein the antibiotic from the bleomycin family is selected from the group consisting of bleomycin A2, bleomycin A5, bleomycin A6, bleomycin B2 or Zeocin™ .

9. A method as claimed in any of claims 6-8 wherein a functional group on the antibiotic is used to link it to the surface.

10. A method as claimed in claim 9 wherein an amine group present on the antibiotic is used to couple the antibiotic to the surface.

11. A method as claimed in claim 10 wherein the antibiotic is coupled to a polyethyleneglycol (PEG) derivitized surface via an amine group.

12. A method as claimed in any of claims 6 to 11 wherein the surface is the surface of an array, a microtitre plate, a slide or a bead.

13. A method as claimed in claim 12 wherein the array is a microarray.

14. A method as claimed in claim 13 wherein the array is a MALDI array.

15. A method as claimed in claim 12 which further comprises removing the ble fusion protein from the surface.

16. A probe, characterized in that it has a target surface comprising an array having a plurality of discrete target areas presenting one or more analyte capture moieties comprising an antibiotic from the bleomycin family.

17. A probe as claimed in claim 16 wherein the antibiotic is provided on the target surface at a high surface density.

18. A probe as claimed in claim 17 wherein the capture moieties have an affinity for the moiety they are intended to capture in the order of 100nM.

19. A probe as claimed in any of claims 16-18 wherein the antibiotic from the bleomycin family is selected from the group consisting of bleomycin, phleomycin, tallysomycin, pepleomycin and Zeocin™.

20. A probe as claimed in claims 19 wherein the antibiotic from the bleomycin family is selected from the group consisting of bleomycin A2, bleomycin A5, bleomycin A6, bleomycin B2 or Zeocin™ .

21. A purification media having a large surface to volume area comprising a target surface presenting one or more analyte capture moieties comprising an antibiotic from the bleomycin family.

22. A purification media as claimed in claim 21 which is a bead.

23. A purification media as claimed in claim 21 or 22 wherein the antibiotic is provided on the target surface at a low surface density.

24. A purification media as claimed in claim 23 wherein the capture moieties have an affinity for the moiety they are intended to capture in the order of 600nM.

25. A purification media as claimed in any of claims 21 - 24 wherein the antibiotic from the bleomycin family is selected from the group consisting of bleomycin, phleomycin, tallysomycin, pepleomycin and Zeocin™.

26. A purification media as claimed in any of claims 21 - 25 wherein the antibiotic from the bleomycin family is selected from the group consisting of bleomycin A2, bleomycin A5, bleomycin A6, bleomycin B2 or Zeocin™ .

27. A purification media as claimed in any of claims 21-26 wherein the antibiotic is bound to the surface via a flexible linker molecule.

28. A purification media as claimed in claim 27 wherein the flexible linker molecule is a polyethylene glycol (PEG).

29. An antibiotic from the bleomycin family characterised in that it is tagged with a marker.

30. An antibiotic as claimed in claim 29 wherein the marker is a visual marker.

31. An antibiotic as claimed in claim 30 wherein the visual marker is a fluorescent marker.

32. An antibiotic as claimed in claim 31 wherein the fluorescent marker is selected from NHS-activated fluorescein, Cy3, Cy5 or Rhodamine.

33. A method for generating soluble forms of an insoluble protein comprising:

i) generating a library of protein variants; and

ii) selecting colonies for the presence of a soluble protein by expressing the protein as a ble fusion protein and selecting on an antibiotic from the bleomycin family.

34. A method as claimed in claim 33 further comprising growing the selected colonies, lysing them and binding the fusion protein to a surface.

35. A method as claimed in claim 34 wherein the surface comprises an antibiotic from the bleomycin family via which the fusion protein is bound.

36. A method of purifying a ble fusion protein from a crude extract comprising the step of immobilising it on a surface via an antibiotic from the bleomycin family and optionally releasing it there from.

37. A method of identifying the cellular localisation of a protein comprising

i) expressing the protein as a ble fusion protein in a cell,

ii) introducing a labelled antibiotic from the bleomycin family into the cell, and

iii) detecting the labelled antibiotic.

38. A method as claimed in claim 37 wherein the antibiotic is one as claimed in any of claims 29-32.

39. A kit for the production of an array comprising a ble vector and a surface derivatised with an antibiotic from the bleomycin family or the components for making said derivatised surface.